

RE: J0225-0848

Lot 3 Turlington Landing

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0225-0848

Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2021/TPI2014 Design Program: MiTek 20/20 8.6

Wind Code: ASCE 7-16 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 17 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	174739685	A1-GE	7/9/2025
2	174739686	A2	7/9/2025
3	174739687	A3	7/9/2025
4	174739688	A4-GE	7/9/2025
5	174739689	B1-GE	7/9/2025
6	174739690	B2	7/9/2025
7	174739691	B3-GR	7/9/2025
8	174739692	C1-GE	7/9/2025
9	174739693	C2	7/9/2025
10	174739694	C3-GR	7/9/2025
11	174739695	D01GE	7/9/2025
12	174739696	D02	7/9/2025
13	174739697	VB-1	7/9/2025
14	174739698	VB-2	7/9/2025
15	174739699	VB-3	7/9/2025
16	174739700	VC-1	7/9/2025
17	174739701	VC-2	7/9/2025

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

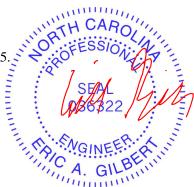
based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2025

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



July 09, 2025



Scale = 1:53.3 5x5 = 7.00 12 12 13 10 4x6 / 15 7 8 16 17 18 40 19 20 0-6-12 3x4 = 3x4 =29 28 39 38 37 36 35 34 33 32 31 30 27 26 25 24 23 22 4x6 =

Plate Off	sets (X,Y)	[30:0-2-8,0-2-0]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	` <u>í</u>	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	21	n/a	n/a		
BCDL	10.0	Code IRC2021/Ti	PI2014	Matri	x-S	, ,					Weight: 233 lb	FT = 20%

25-11-0

LUMBER-TOP CHORD

2x6 SP No 1 2x6 SP No.1

BOT CHORD 2x4 SP No.2 OTHERS

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 25-11-0.

(lb) -Max Horz 2=236(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 23,

12-11-8

All reactions 250 lb or less at joint(s) 21, 2, 31, 32, 33, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, Max Grav 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-5 to 3-7-8, Exterior(2N) 3-7-8 to 12-11-8, Corner(3R) 12-11-8 to 17-4-5 , Exterior(2N) 17-4-5 to 25-11-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 29, 28, 27, 26, 25, 24, 23, 22.

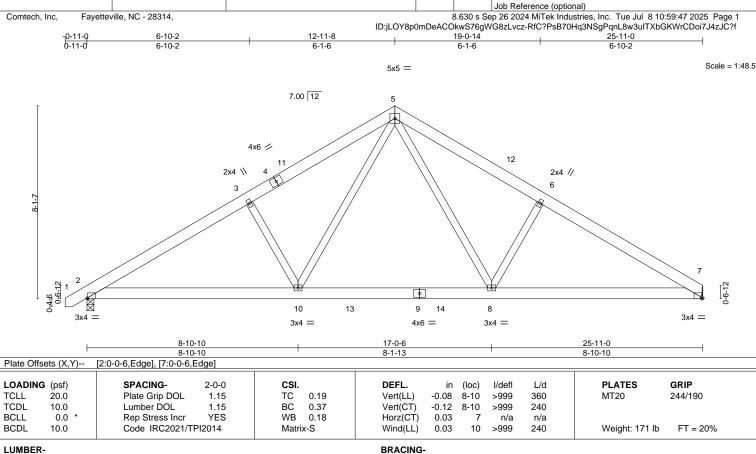


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





TOP CHORD

BOT CHORD

Qty

15

Ply

Lot 3 Turlington Landing

174739686

LUMBER-

WFBS

Job

J0225-0848

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2

REACTIONS. (size) 7=Mechanical, 2=0-3-8

Max Horz 2=189(LC 9)

Truss

A2

Truss Type

COMMON

Max Uplift 7=-59(LC 13), 2=-71(LC 12) Max Grav 7=1212(LC 20), 2=1265(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1840/327, 3-5=-1702/374, 5-6=-1716/379, 6-7=-1854/332

BOT CHORD 2-10=-213/1646, 8-10=-40/1079, 7-8=-200/1527

5-8=-127/839, 6-8=-398/247, 5-10=-124/818, 3-10=-382/240 WFBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 12-11-8, Exterior(2R) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 25-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



Structural wood sheathing directly applied or 5-6-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:47 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 6-10-2 12-11-8 19-0-14 25-11-0 6-10-2 6-1-6 6-10-2 Scale = 1:49.3 5x5 = 7.00 12 5 4x6 🗸 14 4x6 ≥ 6 2x4 \\ 2x4 // 3 12 15 11 16 10 3x4 =3x4 = 3x4 = 4x6 = 3x4 = 8-10-10 17-0-6 25-11-0 8-10-10 8-1-13 8-10-10 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.18 Vert(LL) -0.08 10-12 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.37 Vert(CT) -0.12 10-12 >999 240 WB 0.18 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.03 8 n/a n/a Code IRC2021/TPI2014 Wind(LL) BCDL 10.0 Matrix-S 0.03 12 >999 240 Weight: 173 lb FT = 20%

> BRACING-TOP CHORD

> BOT CHORD

Qty

6

Ply

Lot 3 Turlington Landing

Job Reference (optional)

Structural wood sheathing directly applied or 5-7-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

174739687

LUMBER-

Job

J0225-0848

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=-192(LC 10)

Truss

A3

Truss Type

COMMON

Max Uplift 2=-71(LC 12), 8=-71(LC 13) Max Grav 2=1260(LC 19), 8=1260(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-1832/325, 3-5=-1694/372, 5-7=-1695/372, 7-8=-1832/325 TOP CHORD **BOT CHORD** 2-12=-187/1644. 10-12=-15/1076. 8-10=-179/1500

WEBS 5-10=-124/819, 7-10=-382/240, 5-12=-124/819, 3-12=-382/240

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 12-11-8, Exterior(2R) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 26-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 3 Turlington Landing 174739688 **GABLE** J0225-0848 A4-GE Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:48 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 14-11-12 12-11-8

2-0-4

5-11-12

Scale = 1:52.4 5x12 ||

10-11-4

Structural wood sheathing directly applied or 4-7-10 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

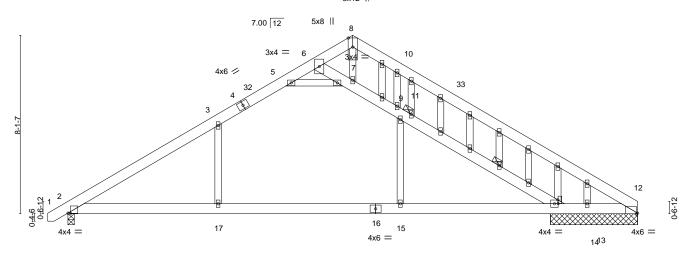


Plate Offs	sets (X,Y)	[2:0-1-6,0-0-2], [12:0-0-10,Edge], [14:0-2-0,0-0-2]											
LOADING	G (psf)	SPACING- 2	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.23	15-17	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.36	15-17	>787	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	12	n/a	n/a			
BCDL	10.0	Code IRC2021/TPI2	014	Matri	x-S	Wind(LL)	0.17	17	>999	240	Weight: 203 lb	FT = 20%	

TOP CHORD

BOT CHORD

JOINTS

Except:

1 Row at midpt

6-0-0 oc bracing: 13-14.

1 Brace at Jt(s): 11

8-0-0

LUMBER-**BRACING-**

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 *Except*

12-16: 2x6 SP 2400F 2.0E **WEBS**

2x4 SP No.2

OTHERS 2x4 SP No.2

REACTIONS. All bearings 3-11-8 except (jt=length) 2=0-3-8.

(lb) - Max Horz 2=236(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 12 except 2=-219(LC 12), 14=-708(LC 28), 13=-130(LC 13) Max Grav All reactions 250 lb or less at joint(s) 14 except 12=462(LC 20), 2=1274(LC 19), 13=1611(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

6-11-12

TOP CHORD 2-3=-1713/234, 3-5=-1333/298, 5-6=-281/788, 6-8=-552/167, 8-10=-677/312,

10-12=-851/115, 6-7=-520/1494, 7-9=-886/359, 9-11=-907/465, 11-14=-1156/424

BOT CHORD 2-17=-193/1459, 15-17=-193/1459, 14-15=-193/1459, 13-14=-565/0, 12-13=0/565

WEBS 5-7=-2332/636, 3-17=0/471, 11-15=0/565, 9-10=-309/364

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 12-11-8, Exterior(2R) 12-11-8 to 17-4-5, Interior(1) 17-4-5 to 25-11-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=219, 14=708, 13=130,
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



July 9,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 3 Turlington Landing 174739689 J0225-0848 B1-GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:48 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

10-11-8

2-6-0

16-11-0

5-11-8

Structural wood sheathing directly applied or 6-0-0 oc purlins.

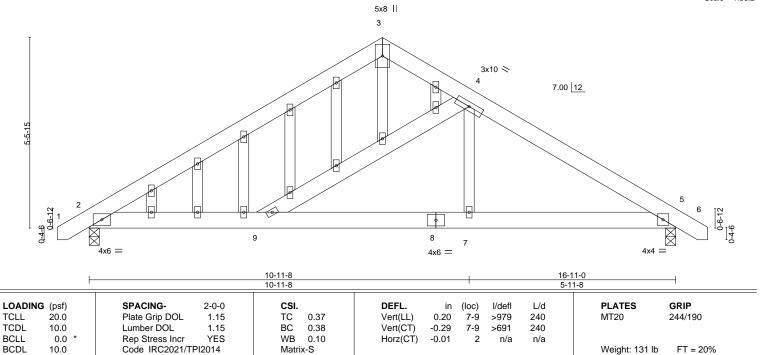
Rigid ceiling directly applied or 10-0-0 oc bracing.

8-5-8 8-5-8

Scale = 1:33.2

17-10-0

0-11-0



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 2x6 SP No.1 BOT CHORD

2x6 SP No.1 *Except* WFBS 4-7: 2x4 SP No.2 **OTHERS** 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 5=0-3-8 Max Horz 5=-161(LC 10)

Max Uplift 2=-159(LC 12), 5=-159(LC 13) Max Grav 2=720(LC 1), 5=720(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 3-4=-534/223, 4-5=-916/160, 2-3=-720/148 BOT CHORD 2-9=-56/550, 7-9=-173/689, 5-7=-173/689

WEBS 4-7=-136/423

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 1-4-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=159, 5=159.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



J0225-0848 B2 COMMON 2 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:49 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 0-11-0 8-5-8 8-5-8 16-11-0 17-10-0 0-11-0 Scale = 1:33.5 6x6 =3 7.00 12 11 12 0-4-6 0-6-12 0-6-12 4x6 = 13 14 8 6 2x4 // 4x6 = 4x6 =2x4 \\ 5-1-12 11-9-4 16-11-0 5-1-12 6-7-8 5-1-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.35 Vert(LL) -0.01 4-6 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.21 Vert(CT) -0.02 4-6 >999 240

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

0.00

-0.01

6-8

n/a

>999

n/a

Rigid ceiling directly applied or 6-0-0 oc bracing.

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Weight: 108 lb

FT = 20%

240

Qty

Ply

Lot 3 Turlington Landing

174739690

LUMBER-

REACTIONS.

BCLL

BCDL

Job

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.2 **WEBS**

0.0

10.0

(size) 8=0-3-8, 4=0-3-8

Max Horz 8=-129(LC 10)

Truss

Truss Type

Max Uplift 8=-70(LC 12), 4=-48(LC 13) Max Grav 8=1019(LC 1), 4=459(LC 26)

Rep Stress Incr

Code IRC2021/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-489/671, 3-4=-444/0 **BOT CHORD** 2-8=-472/518 4-6=0/266 **WEBS** 3-8=-986/589, 3-6=0/320

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 8-5-8, Exterior(2R) 8-5-8 to 12-10-5, Interior(1) 12-10-5 to 17-8-5 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4.





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 3 Turlington Landing 174739691 J0225-0848 B3-GR COMMON 2 Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:49 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 8-5-8 8-5-8 16-11-0 8-5-8 Scale = 1:32.4 6x6 II 7.00 12 0-6-12 6 4x8 = 4 8 5 9 3x10 / 6x8 = 3x10 📏 4x8 = <u>5-1-1</u>2 16-11-0 5-1-12 6-7-8 5-1-12 Plate Offsets (X,Y)--[4:0-8-1,0-0-4], [6:0-5-7,0-0-12] LOADING (psf) SPACING-CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.31 Vert(LL) -0.06 4-6 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.69 Vert(CT) -0.12 4-6 >999 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.61 Horz(CT) 0.01 n/a n/a BCDL 10.0 Code IRC2021/TPI2014 Matrix-S Wind(LL) 0.04 >999 240 Weight: 231 lb FT = 20% 4-6 LUMBER-**BRACING-**TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

TOP CHORD 2x6 SP No 1 BOT CHORD 2x8 SP No 1 2x4 SP No 2

WFBS

(size) 3=0-3-8, 6=0-3-8 Max Horz 6=-118(LC 4)

Max Uplift 3=-261(LC 9), 6=-252(LC 8)

Max Grav 3=3966(LC 24), 6=3996(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-531/467, 2-3=-5179/319

BOT CHORD 1-6=-340/444, 4-6=-88/1506, 3-4=-194/4390

WFBS 2-6=-2150/212. 2-4=-239/4986

NOTES-

REACTIONS.

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-6-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design. 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed;
- MWFRS (envelope); cantilever left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 3=261, 6=252,
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1129 lb down and 79 lb up at 6-4-12, 1129 lb down and 79 lb up at 8-4-12, 1129 lb down and 79 lb up at 10-4-12, 1129 lb down and 79 lb up at 12-4-12, and 1129 lb down and 79 lb up at 14-4-12, and 1129 lb down and 79 lb up at 15-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 1-3=-20



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 3 Turlington Landing
J0225-0848	B3-GR	COMMON	1	_	174739691
30223-0646	B3-GK	COMMON		2	Joh Reference (entional)

Comtech, Inc, Fayetteville, NC - 28314,

▲ Job Reference (optional)
8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:49 2025 Page 2 ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJČ?f

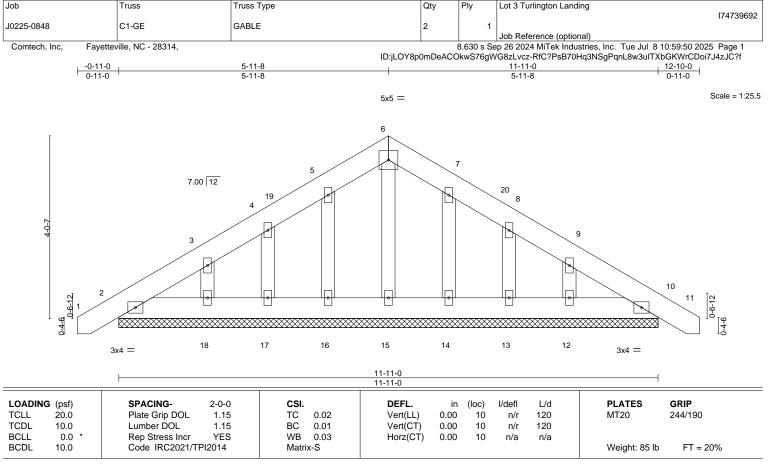
LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 7=-1007(B) 8=-1007(B) 9=-1007(B) 10=-1007(B) 11=-1007(B) 12=-1007(B)





818 Soundside Road Edenton, NC 27932



LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 **OTHERS**

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-11-0.

Max Horz 2=-118(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

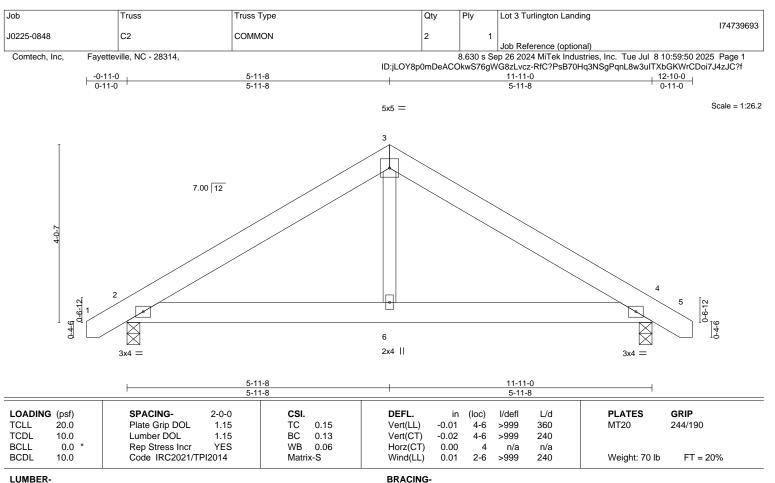
- 1) Unbalanced roof live loads have been considered for this design.
- MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-5 to 3-7-8, Exterior(2N) 3-7-8 to 5-11-8, Corner(3R) 5-11-8 to 10-4-5, Exterior(2N) 10-4-5 to 12-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 **BOT CHORD** 2x6 SP No.1 2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 4=0-3-8

Max Horz 2=-94(LC 10)

Max Uplift 2=-39(LC 12), 4=-39(LC 13) Max Grav 2=520(LC 1), 4=520(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

2-3=-595/179, 3-4=-595/179 TOP CHORD **BOT CHORD** 2-6=-34/433, 4-6=-34/433

WEBS 3-6=0/279

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 5-11-8, Exterior(2R) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

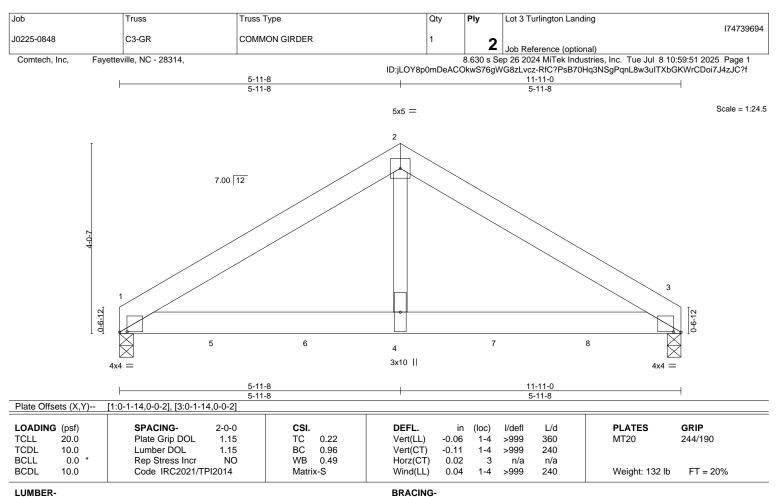
Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No 1 2x4 SP No 2 WFBS

REACTIONS.

(size) 1=0-3-8, 3=0-3-8 Max Horz 1=-85(LC 25)

Max Uplift 1=-200(LC 8), 3=-205(LC 9) Max Grav 1=3188(LC 2), 3=3269(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-4268/283 2-3=-4268/283 BOT CHORD 1-4=-194/3629, 3-4=-194/3629

WFBS 2-4=-168/3970

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=200, 3=205,
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1129 lb down and 79 lb up at 2-0-12, 1129 lb down and 79 lb up at 4-0-12, 1129 lb down and 79 lb up at 6-0-12, and 1129 lb down and 79 lb up at 8-0-12, and 1129 lb down and 79 lb up at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-60, 1-3=-20

July 9,2025

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job	Truss	Truss Type	Qty	Ply	Lot 3 Turlington Landing
J0225-0848	C3-GR	COMMON GIRDER	1	2	174739694

Comtech, Inc, Fayetteville, NC - 28314,

Z Job Reference (optional) 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:51 2025 Page 2 ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJČ?f

LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 4=-1007(B) 5=-1007(B) 6=-1007(B) 7=-1007(B) 8=-1007(B)





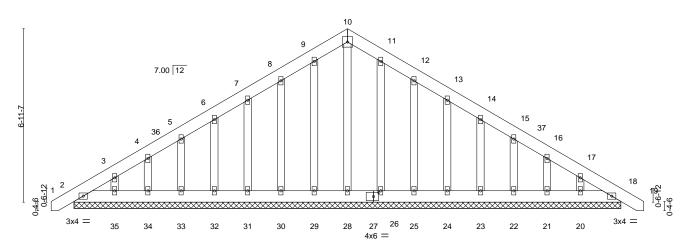
Qty 174739695 J0225-0848 D01GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:52 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f 10-11-8 21-11-0 22-10-0 0-11-0 10-11-8 10-11-8

5x5 =

Ply

Scale = 1:46.2

Lot 3 Turlington Landing



21-11-0 21-11-0 [27:0-2-8 0-2-0

Plate Oils	Plate Offsets (A, Y) [27:0-2-8,0-2-0]											
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code IRC2021/TF	PI2014	Matri	x-S						Weight: 186 lb	FT = 20%

BOT CHORD 2x6 SP No.1

2x6 SP No 1

2x4 SP No.2 OTHERS

BRACING-TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins. **BOT CHORD**

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 21-11-0.

(lb) -Max Horz 2=-205(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 29, 30, 31, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22, 21, 20 Max Grav All reactions 250 lb or less at joint(s) 2, 28, 29, 30, 31, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22,

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

LUMBER-

TOP CHORD

Job

Truss

Truss Type

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-5 to 3-7-8, Exterior(2N) 3-7-8 to 10-11-8, Corner(3R) 10-11-8 to 15-4-5 , Exterior(2N) 15-4-5 to 22-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 1-4-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 29, 30, 31, 32, 33, 34, 35, 18, 26, 25, 24, 23, 22, 21, 20.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply Lot 3 Turlington Landing 174739696 J0225-0848 D02 6 Common Job Reference (optional) Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Tue Jul 8 10:59:52 2025 Page 1 Comtech, Inc. ID:jLOY8p0mDeACOkwS76gWG8zLvcz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

10-11-8

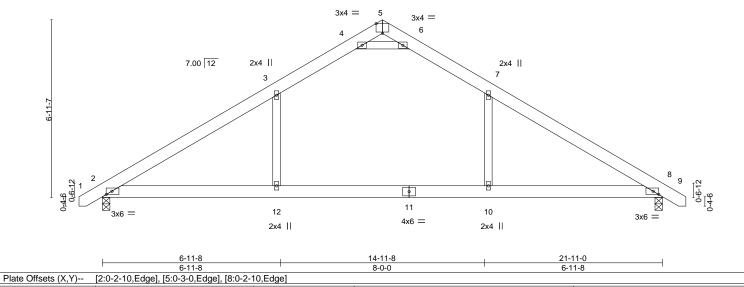
4-0-0

14-11-8 16-0-14 21-11-0 4-0-0 1-1-6 5-10-2

Structural wood sheathing directly applied or 4-11-2 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Scale = 1:45.1 4x6 =



LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.84 Vert(LL) -0.24 10-12 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.43 Vert(CT) -0.37 10-12 >698 240 WB 0.34 **BCLL** 0.0 Rep Stress Incr YES Horz(CT) 0.02 8 n/a n/a BCDL 10.0 Code IRC2021/TPI2014 Matrix-S Wind(LL) 0.12 >999 240 Weight: 130 lb FT = 20% 12

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=-164(LC 10) Max Uplift 2=-62(LC 12), 8=-62(LC 13) Max Grav 2=1148(LC 19), 8=1148(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

5-10-2 5-10-2

6-11-8

1-1-6

TOP CHORD 2-3=-1570/217, 3-4=-1150/281, 4-5=-246/1379, 5-6=-246/1380, 6-7=-1150/281,

7-8=-1570/217

BOT CHORD 2-12=-65/1238, 10-12=-65/1238, 8-10=-65/1238 WEBS 7-10=0/529, 3-12=0/529, 4-6=-2764/594

NOTES-

1) Unbalanced roof live loads have been considered for this design.

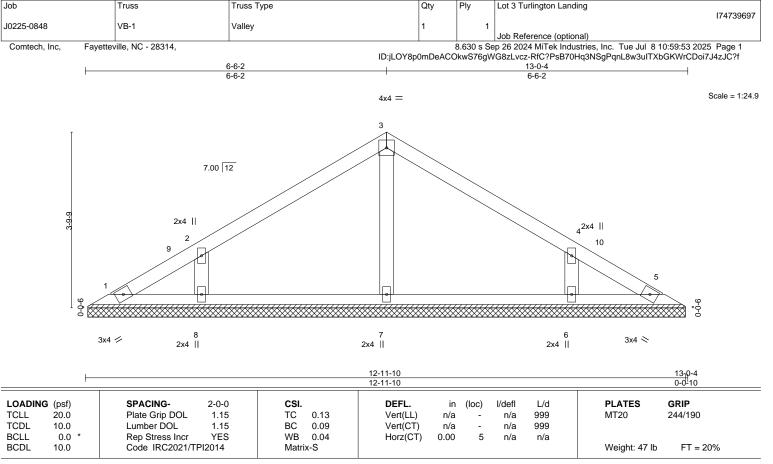
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 10-11-8, Exterior(2R) 10-11-8 to 15-1-4, Interior(1) 15-1-4 to 22-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS**

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-11-0.

Max Horz 1=-84(LC 8) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=275(LC 1), 8=312(LC 19), 6=312(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 6-6-2, Exterior(2R) 6-6-2 to 10-10-15, Interior(1) 10-10-15 to 12-5-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.

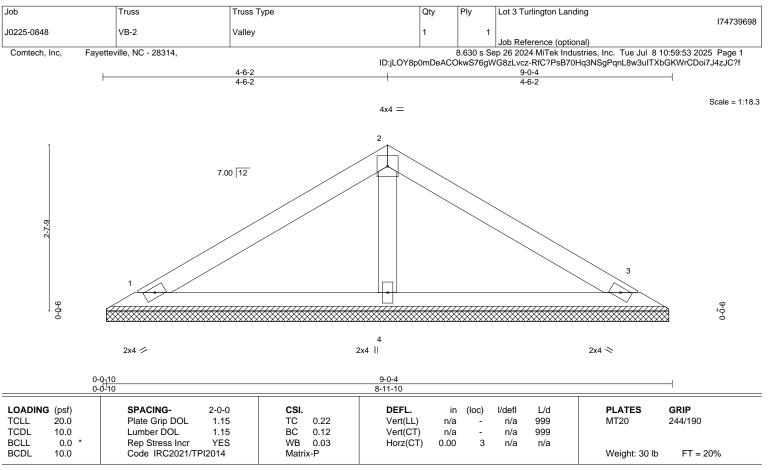




WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS**

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-11-0, 3=8-11-0, 4=8-11-0

Max Horz 1=-56(LC 8)

Max Uplift 1=-27(LC 12), 3=-32(LC 13)

Max Grav 1=166(LC 1), 3=166(LC 1), 4=299(LC 1)

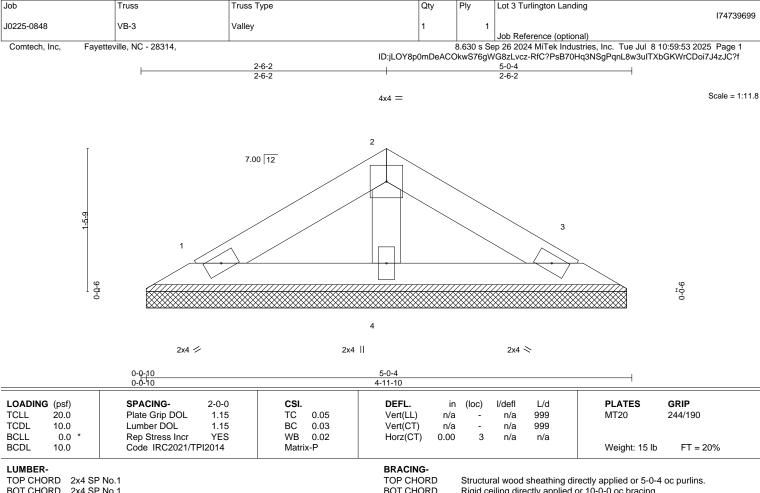
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.







REACTIONS.

BOT CHORD 2x4 SP No.1

2x4 SP No.2 **OTHERS**

> (size) 1=4-11-0, 3=4-11-0, 4=4-11-0 Max Horz 1=-28(LC 8)

Max Uplift 1=-13(LC 12), 3=-16(LC 13) Max Grav 1=82(LC 1), 3=82(LC 1), 4=148(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Rigid ceiling directly applied or 10-0-0 oc bracing.

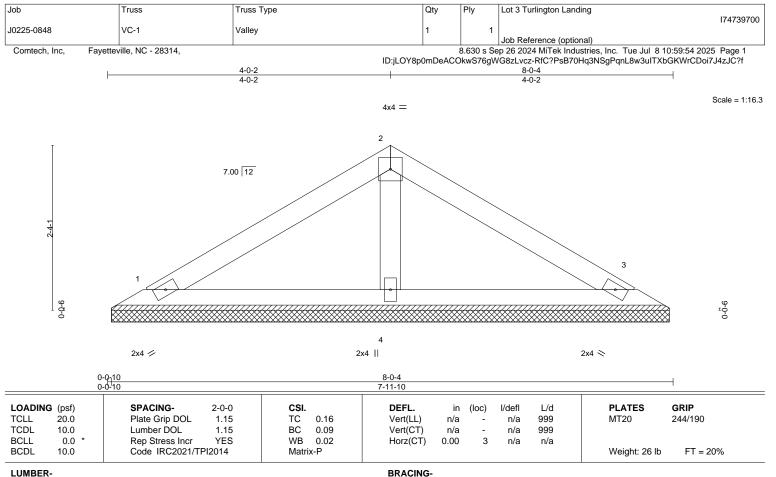


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 2x4 SP No.2 **OTHERS**

(size) 1=7-11-0, 3=7-11-0, 4=7-11-0

Max Horz 1=49(LC 9)

Max Uplift 1=-23(LC 12), 3=-28(LC 13)

Max Grav 1=145(LC 1), 3=145(LC 1), 4=261(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

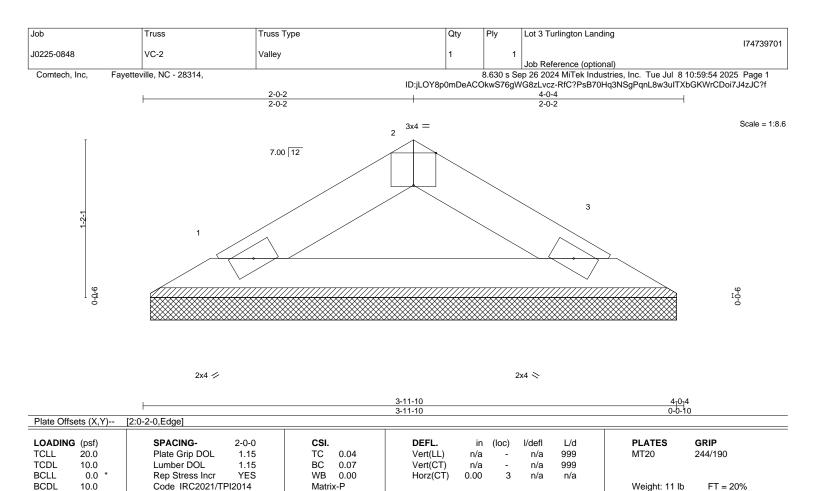
Rigid ceiling directly applied or 10-0-0 oc bracing.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)





LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 **BRACING-**

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-0-4 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-11-0, 3=3-11-0

Max Horz 1=-21(LC 8)

Max Uplift 1=-7(LC 12), 3=-7(LC 13) Max Grav 1=116(LC 1), 3=116(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall

building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.
Dimensions are in ft-in-sixteenths.
Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ from outside edge of truss.

₹

This symbol indicates the required direction of slots in connector plates.

*Plate location details available in MiTek software or upon request.

PLATE SIZE

4 × 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur Min size shown is for crushing only.

Industry Standards: ANSI/TPI1: National Design Specification for Metal

DSB-22:

Plate Connected Wood Truss Construction.
Design Standard for Bracing.
Building Component Safety Information,
Guide to Good Practice for Handling,
Installing, Restraining & Bracing of Metal
Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2023 MiTek® All Rights Reserved

MITOK



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

▲ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.